



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,872	12/22/2000	Teruo Tajima	PM 276457 T4HW-00S0948	5705

7590 04/29/2004

PILLSBURY, WINTHROP LLP
1600 TYSONS BOULEVARD
MCLEAN, VA 22102

EXAMINER	P
----------	---

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,872

Applicant(s)

TAJIMA, TERUO

Examiner

Gregory B Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 4/9/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.
 - Claim 7 fails to show ordered steps necessary for performing a method.
 - Claims 8-12 are rejected due to their dependence from claim 7.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6, 7, 12, 13, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi (US006272114B1).

- In regards to Claims 1, 6, 7, 12, 13, and 18,

Kobayashi discloses an apparatus and method for controlling other apparatuses in an audio and video communications system (Title; Abstract; Col. 1, line 64).

Referring to Fig. 4, Kobayashi shows that Node A has two IEEE 1394 bus ports to which Nodes B-D are connected (Col. 1, lines 40-50). Node A ports are allocated node and address IDs through communication with Nodes B-D, thereby designating parent-child relationships between the nodes so that control is done in priority order (Col. 6-7, lines 20-7; claim 1/7/13 – AV apparatus/method/system for controlling apparatuses and having a plurality of connection terminals to which the apparatuses can be selectively connected wherein identifiers are allocated to the connection terminals for designating a specific one of the apparatuses so that the apparatuses are

controlled in priority order; claim 6/12/18 – connection terminals are serial bus terminals that comply with IEEE 1394 standards).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Ogino et al. (US006038625A), hereafter Ogino.

- In regards to Claims 2, 8, and 14,

Kobayashi discloses an apparatus and method for controlling other apparatuses in an audio/video communications system that covers all limitations of the parent claims.

Kobayashi does not explicitly utilize characters or a symbol indicating a model number or type of apparatus as the identifier for each connection port.

Ogino discloses an apparatus, method and system for controlling audio/video apparatuses (Abstract). Referring to Fig. 1c, Ogino shows that set-top box 12 may be connected to a plurality of other apparatuses 14-24 over ports of an IEEE 1394 bus (Col. 6, lines 13-40). Ogino shows that, while the physical IDs assigned to the devices 14-24 may change when other devices are added and/or removed, a service registry may be

used to register the GUID of each device, containing vendor identification and its connection point information (port allocation; Col. 2-3, lines 66-30; Col. 19-20, lines 63-8; claim 2/8/14 – each identifier is characters or a symbol that indicates a model number or type of apparatus; claim 2/8/14 – any apparatus designated by the identifier is controlled prior to any other apparatuses).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the identifiers allocated to control apparatus of Kobayashi by including the GUID of the connected device, as taught by Ogino. This modification would provide a persistent identifier for each apparatus in the system which could be associated with the bus ID of each apparatus, which may change as apparatuses are added/removed to the system.

8. Claims 3-5, 9-11, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi v. Zou as applied to claims 2, 8, and 14 above, and further in view of Johas Teener (US006636914B1), hereafter Teener.

- In regards to Claims 3-5, 9-11, and 15-17,

Kobayashi v. Zou discloses an apparatus, method and system for controlling audio/video apparatuses that covers all limitations of the parent claim.

Neither Kobayashi nor Zou discloses how bus arbitration is performed between at least two apparatuses connected to the same connection terminal when one of the

apparatuses is designated by the port identifier or when both apparatuses are designated by the port identifier but only one is directly connected.

Teener discloses a method and apparatus for arbitration and fairness on a bus (Title). Referring to Figs. 2-4, Teener shows Nodes 1-3 connected to root Node 4 through the same port. Teener shows, if each of Nodes 1-3 request access to the bus, that Node 3 would be selected prior to Nodes 2-3 because Node 3 is directly allocated to the connecting port of Node 4 (Col. 2-3; lines 10-33; claim 3/4/9/10/15/16 – at least two apparatuses are connected to the same connection terminal; claim 4/10/16 – both of at least two apparatuses designated by the identifier allocated to the connection terminal; claim 3/9/15 – one of the at least two apparatuses is designated by the identifier allocated to the connection terminal and selected prior to the any other of the at least two apparatuses, which is not designated by the identifier; claim 4/10/16 – one of the at least two apparatuses is directly connected to the connection terminal and is selected prior to the any other of the at least two apparatuses, which is indirectly connected to the connection terminal; claim 5/11/17 – apparatus A designated by a specific identifier is connected to a connection terminal to which the specific identifier is allocated; claim 5/11/17 – apparatus B designated by the specific identifier is connected to a connection terminal to which the specific identifier is not allocated or to a connection terminal to which an identifier different from the specific identifier is allocated; claim 5/11/17 – apparatus A is selected prior to apparatus B).

It would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the apparatus, method and system of Kobayashi by expressly

showing arbitration control when two nodes are connected to the same port and one node is designated by the port identifier or both nodes are designated by the port identifier but one is directly connected to the port, as shown by Teener. By establishing parent-child relationships between all of the nodes and controlling bus arbitration based on the port allocations and direct connections to the port, this modification provides both prioritized access and fairness among all nodes in the system.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Niida et al. (US006690648B2) discloses a data communication apparatus, method, and system utilizing reception capability information of a destination node
- Kang (US006658474B2) discloses a home network system and method of allocating node identification
- Staats (US006631426B1) discloses automatic ID allocation for AV/C entities
- Dale et al. (US006574688B1) discloses a port manager controller for connecting various function modules
- Gibbs (US006452935B1) discloses stream allocation in home networks

- Lawande et al. (US006405247B1) discloses a method and apparatus for operating the internet protocol over a high-speed serial bus
- James et al. (US006374316B1) discloses a method and system for circumscribing a topology to form ring structures
- Iijima (US006286071B1) discloses a communication control method, communication system and electronic device used therefor
- Takayama et al. (US006138196A) discloses a communication system for providing digital data transfer, electronic equipment for transferring data using the communication system, and an interface control device
- Watanabe (US006138178A) discloses a controlled device storing multiple drivers that judges and downloads a particular driver corresponding to a controller's operating system having an identical or greater version number


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 703-305-0633. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
4-21-2004



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600